

SEQUENCE LISTING

<110> BML, INC.

<120> Method of Detecting Risk Factor for Onset of Diabetes

<130> PBM37

<140>

<141>

<160> 23

<170> PatentIn Ver. 2.0

<210> 1

<211> 1305

<212> DNA

<213> Hominidae

<220>

<221> CDS

<222> (1) .. (900)

<400> 1

-103 aaa cagaagggga ggtgcagttt cagaaccag ccagcctctc -61

tcttgctgcc tagcctcctg ccggcctcat cttegccag ccaacccgc ctggagcct -1

atg gcc aac tgc gag ttc agc ccg gtg tcc ggg gac aaa ccc tgc tgc	48
Met Ala Asn Cys Glu Phe Ser Pro Val Ser Gly Asp Lys Pro Cys Cys	
1 5 10 15	

cgg ctc tct agg aga gcc caa ctc tgt ctt ggc gtc agt atc ctg gtc	96
Arg Leu Ser Arg Arg Ala Gln Leu Cys Leu Gly Val Ser Ile Leu Val	
20 25 30	

ctg atc ctc gtc gtg gtg ctc gcg gtg gtc gtc ccg agg tgg cgc cag	144
Leu Ile Leu Val Val Val Leu Ala Val Val Val Pro Arg Trp Arg Gln	
35 40 45	

cag tgg agc ggt ccg ggc acc acc aag cgc ttt ccc gag acc gtc ctg	192
Gln Trp Ser Gly Pro Gly Thr Thr Lys Arg Phe Pro Glu Thr Val Leu	
50 55 60	

gcg cga tgc gtc aag tac act gaa att cat cct gag atg aga cat gta	240
---	-----

Ala 65	Arg	Cys	Val	Lys	Tyr 70	Thr	Glu	Ile	His	Pro 75	Glu	Met	Arg	His	Val 80	
gac Asp	tgc Cys	caa Gln	agt Ser	gta Val 85	tgg Trp	gat Asp	gct Ala	ttc Phe	aag Lys 90	ggg Gly	gca Ala	ttt Phe	att Ile	tca Ser 95	aaa Lys	288
cat His	cct Pro	tgc Cys	aac Asn 100	att Ile	act Thr	gaa Glu	gaa Glu	gac Asp 105	tat Tyr	cag Gln	cca Pro	cta Leu	atg Met 110	aag Lys	ttg Leu	336
gga Gly	act Thr	cag Gln 115	acc Thr	gta Val	cct Pro	tgc Cys	aac Asn 120	aag Lys	att Ile	ctt Leu	ctt Leu	tgg Trp 125	agc Ser	aga Arg	ata Ile	384
aaa Lys	gat Asp 130	ctg Leu	gcc Ala	cat His	cag Gln	ttc Phe 135	aca Thr	cag Gln	gtc Val	cag Gln 140	cgg Arg	gac Asp	atg Met	ttc Phe	acc Thr	432
ctg Leu 145	gag Glu	gac Asp	acg Thr	ctg Leu	cta Leu 150	ggc Gly	tac Tyr	ctt Leu	gct Ala	gat Asp 155	gac Asp	ctc Leu	aca Thr	tgg Trp	tgt Cys 160	480
ggg Gly	gaa Glu	ttc Phe	aac Asn 165	act Thr	tcc Ser	aaa Lys	ata Ile	aac Asn 170	tat Tyr	caa Gln	tct Ser	tgc Cys	cca Pro	gac Asp 175	tgg Trp	528
aga Arg	aag Lys	gac Asp	tgc Cys 180	agc Ser	aac Asn	aac Asn	cct Pro	gtt Val 185	tca Ser	gta Val	ttc Phe	tgg Trp 190	aaa Lys	acg Thr	gtt Val	576
tcc Ser	cgc Arg	agg Arg 195	ttt Phe	gca Ala	gaa Glu	gct Ala	gcc Ala 200	tgt Cys	gat Asp	gtg Val	gtc Val	cat His 205	gtg Val	atg Met	ctc Leu	624
aat Asn	gga Gly 210	tcc Ser	cgc Arg	agt Ser	aaa Lys	atc Ile 215	ttt Phe	gac Asp	aaa Lys	aac Asn 220	agc Ser	act Thr	ttt Phe	ggg Gly	agt Ser	672
gtg Val 225	gaa Glu	gtc Val	cat His	aat Asn	ttg Leu 230	caa Gln	cca Pro	gag Glu	aag Lys	gtt Val 235	cag Gln	aca Thr	cta Leu	gag Glu	gcc Ala 240	720
tgg Trp	gtg Val	ata Ile	cat His	ggg Gly 245	gga Gly	aga Arg	gaa Glu	gat Asp	tcc Ser 250	aga Arg	gac Asp	tta Leu	tgc Cys	cag Gln	gat Asp 255	768
ccc Pro	acc Thr	ata Ile	aaa Lys	gag Glu	ctg Leu	gaa Glu	tcg Ser	att Ile	ata Ile	agc Ser	aaa Lys	agg Arg	aat Asn	att Ile	caa Gln	816

260

265

270

ttt tcc tgc aag aat atc tac aga cct gac aag ttt ctt cag tgt gtg 864
 Phe Ser Cys Lys Asn Ile Tyr Arg Pro Asp Lys Phe Leu Gln Cys Val
 275 280 285

aaa aat cct gag gat tca tct tgc aca tct gag atc tgagccagtc 910
 Lys Asn Pro Glu Asp Ser Ser Cys Thr Ser Glu Ile
 290 295 300

gctgtggttg ttttagctcc ttgactcctt gtgggttatg tcatcataca tgactcagca 970
 tacctgctgg tgcagagctg aagatcttgg agggctcctcc acaataaggt caatgccaga 1030
 gacggaagcc tttttcccca aagtcttaaa ataacttata tcatcagcat acctttattg 1090
 tgatctatca atagtcaaga aaaattattg tataagatta gaatgaaaat tgtatgttaa 1150
 gttacttcac ttttaattctc atgtgaccc tttatgttat ttatatattg gtaacatcct 1210
 ttctattgaa aaatcaccac accaaacctc tcttattaga acaggcaagt gaagaaaagt 1270
 gaatgctcaa gtttttcaga aagcattaca ttccc 1305

<210> 2
 <211> 300
 <212> PRT
 <213> Hominidae

<400> 2
 Met Ala Asn Cys Glu Phe Ser Pro Val Ser Gly Asp Lys Pro Cys Cys
 1 5 10 15

Arg Leu Ser Arg Arg Ala Gln Leu Cys Leu Gly Val Ser Ile Leu Val
 20 25 30

Leu Ile Leu Val Val Val Leu Ala Val Val Val Pro Arg Trp Arg Gln
 35 40 45

Gln Trp Ser Gly Pro Gly Thr Thr Lys Arg Phe Pro Glu Thr Val Leu
 50 55 60

Ala Arg Cys Val Lys Tyr Thr Glu Ile His Pro Glu Met Arg His Val
 65 70 75 80

Asp Cys Gln Ser Val Trp Asp Ala Phe Lys Gly Ala Phe Ile Ser Lys
 85 90 95

His Pro Cys Asn Ile Thr Glu Glu Asp Tyr Gln Pro Leu Met Lys Leu
100 105 110

Gly Thr Gln Thr Val Pro Cys Asn Lys Ile Leu Leu Trp Ser Arg Ile
115 120 125

Lys Asp Leu Ala His Gln Phe Thr Gln Val Gln Arg Asp Met Phe Thr
130 135 140

Leu Glu Asp Thr Leu Leu Gly Tyr Leu Ala Asp Asp Leu Thr Trp Cys
145 150 155 160

Gly Glu Phe Asn Thr Ser Lys Ile Asn Tyr Gln Ser Cys Pro Asp Trp
165 170 175

Arg Lys Asp Cys Ser Asn Asn Pro Val Ser Val Phe Trp Lys Thr Val
180 185 190

Ser Arg Arg Phe Ala Glu Ala Ala Cys Asp Val Val His Val Met Leu
195 200 205

Asn Gly Ser Arg Ser Lys Ile Phe Asp Lys Asn Ser Thr Phe Gly Ser
210 215 220

Val Glu Val His Asn Leu Gln Pro Glu Lys Val Gln Thr Leu Glu Ala
225 230 235 240

Trp Val Ile His Gly Gly Arg Glu Asp Ser Arg Asp Leu Cys Gln Asp
245 250 255

Pro Thr Ile Lys Glu Leu Glu Ser Ile Ile Ser Lys Arg Asn Ile Gln
260 265 270

Phe Ser Cys Lys Asn Ile Tyr Arg Pro Asp Lys Phe Leu Gln Cys Val
275 280 285

Lys Asn Pro Glu Asp Ser Ser Cys Thr Ser Glu Ile
290 295 300

<210> 3
<211> 61
<212> DNA
<213> Hominidae

<400> 3
gcggcgccgc gccccgcgcc cgtcccgccg cccccgccg atcttcgccc agccaacccc 60

g

61

<210> 4
<211> 21
<212> DNA
<213> Hominidae

<400> 4
accggtgcgc cttagtcgcc a

21

<210> 5
<211> 21
<212> DNA
<213> Hominidae

<400> 5
tagactgcat gttagacgag a

21

<210> 6
<211> 62
<212> DNA
<213> Hominidae

<400> 6
cgccccgcgc gccccgcgcc cgccccgcgc cccccgcgcg tttggaccta tgaattgtta 60

cc 62

<210> 7
<211> 21
<212> DNA
<213> Hominidae

<400> 7
gacatgctaa attgatctca g

21

<210> 8
<211> 60
<212> DNA
<213> Hominidae

<400> 8
cgccccgcgc gccccgcgcc cgccccgcgc cccccgcgcg cagcagaagt cactctgttc 60

<210> 9
<211> 21
<212> DNA
<213> Hominidae

<400> 9
ccattctcca gcctccgtct t

21

<210> 10
<211> 62
<212> DNA
<213> Hominidae

<400> 10
cgcccgcgc gccccgcgc cgtcccgccg ccccgcccg caagcactga ctgagtaacg 60

tc 62

<210> 11
<211> 22
<212> DNA
<213> Hominidae

<400> 11
aaactgctgg aggatggtga tt

22

<210> 12
<211> 63
<212> DNA
<213> Hominidae

<400> 12
cgcccgcgc gccccgcgc cgtcccgccg ccccgcccg ttcactgtga tatttgcaac 60

agg 63

<210> 13
<211> 23
<212> DNA
<213> Hominidae

<400> 13
ggttgatggt tggggttctt tgt

23

<210> 14
<211> 64
<212> DNA
<213> Hominidae

<400> 14
cgcccgccgc gccccgcgcc cgtcccgccg cccccgcccg tgtggattct tttgtggact 60
gatt 64

<210> 15
<211> 61
<212> DNA
<213> Hominidae

<400> 15
cgcccgccgc gccccgcgcc cgtcccgccg cccccgcccg ttgtccaggg cgtgctacaa 60
a 61

<210> 16
<211> 21
<212> DNA
<213> Hominidae

<400> 16
agattcacac agccctccaa g 21

<210> 17
<211> 62
<212> DNA
<213> Hominidae

<400> 17
cgcccgccgc gccccgcgcc cgtcccgccg cccccgcccg ttagegaatt ggacgacaga 60
tg 62

<210> 18
<211> 22
<212> DNA
<213> Hominidae

<400> 18
tctggcattg accttattgt gg 22

<210> 19
 <211> 22
 <212> DNA
 <213> Hominidae

<400> 19
 ctccgccact ctctgcaca ca

22

<210> 20
 <211> 20
 <212> DNA
 <213> Hominidae

<400> 20
 gggcctccag cagaagtcac

20

<210> 21
 <211> 21
 <212> DNA
 <213> Hominidae

<400> 21
 ttgtccaggg cgtgctacaa a

21

<210> 22
 <211> 66
 <212> DNA
 <213> Hominidae

<400> 22
 ttagcgaatt ggacgacaga tgtatcctac ggtctcttga tttccttttt tgctttcttg 60

tcatag

66